

Date: Fri, 17 Jun 94 04:30:22 PDT
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V94 #192
To: Ham-Equip

Ham-Equip Digest Fri, 17 Jun 94 Volume 94 : Issue 192

Today's Topics:

"Intrinsically safe"?

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 17 Jun 1994 06:42:56 GMT
From: rosevax!texan!bill@uunet.uu.net
Subject: "Intrinsically safe"?
To: ham-equip@ucsd.edu

In article <2tof1u\$24h@paperboy.ids.net> alavarre@ids.net writes:

>
> [delete ome stuff]
>
> In particular, these cite
> Class I, II, III, Division 1 Groups C,D,E,F, & G, Nonincentive

> class I, Division 1, Groups C&D
>

Intrinsic safety is related to the chance that an electrical or
electronic device can initiate an explosion in a flammable
atmosphere. Div 1 has the explosive atmosphere present at all
times. Intrinsic safety requires that two improbable failures
occur before ignition energy is present. Div 2 has the explosive
atmosphere present only as the result of an improbable event. So,
only one improbable failure failure is required for an explosion.
This is called the non-incendive category. In either case, two

improbable events are required to ignite an explosive atmosphere.
The Classes refer to vapor, dust, and other mixtures in air.

I hope this helps, but it is just a personal opinion. Don't bet
your company's future on these statements.

Bill

Date: 17 Jun 94 08:54:54 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!lll-winken.llnl.gov!noc.near.net!
news.delphi.com!BIX.com!jdow@network.ucsd.edu
To: ham-equip@ucsd.edu

References <1994Jun12.144307.1558@ke4zv.atl.ga.us>, <jdow.771493529@BIX.com>,
<CSLE87-150694132623@145.39.1.10>p
Subject : Re: scrambling for HF/SSB?

CSLE87@email.mot.com (Karl Beckman) writes:

>Let's put some kind of magnitude to "royal PITA" for this interface. You
>need to first find a way to run 14.4 kB across an SSB channel, complete
>with HF fading, with a bit error rate of 10^{-5} or so. Many hams would
>LOVE to see this so they could improve the domestic HF packet forwarding
>network throughput and delivery response time, so you become an instant
>ham-hero.

>That done, you can now couple in the STU. But the questioner stated that
>this is for commercial use in a foreign country, and the STU units are
>considered as "Munitions" by the U. S. State Dept. Thus he's not going to
>have any great opportunity to put his hands on one in the near future.

>--

>Karl Beckman, P.E. < Genius may have its limitations, but >
>Motorola LMPS- Analog Data < stupidity is not thus handicapped. >
> < - Elbert Hubbard >
>The statements and opinions expressed here are not those of Motorola Inc.
>Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

14.4K? Whazzat - we're running STU-IIIs at 4800bps on Standard M terminals.
The voice quality is nothing to write home about. But it IS readable.

And I never said it'd be EASY to get the STU-IIIs. (Um, but it is not all
THAT hard to get DES encoder chips.... A trio of them with different keys
CAN provide very good security for many applications. Of course they too are
<cough> munitions. But as small as they are smuggling is easier I suspect.
Of course the Europeans and Asians have access to homegrown efforts.... The

hard part is the digital voice algorithms.

{^_^} Joanne Dow, Editor Amiga Exchange, BIX
jdow@bix.com

End of Ham-Equip Digest V94 #192
